RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 539,527

Source: I two

Date Processed by STIC: 10/3/06

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 10/03/2006
PATENT APPLICATION: US/10/539,527   TIME: 10:13:53

        Input Set : A:\ENDOC.011APC.txt
        Output Set: N:\CRF4\10032006\J539527.raw

```
 4 <110> APPLICANT: GIRARD, Jean-Philippe
 5        AGUILAR, Luc
 6        ERARD, Monique
 7        HARALDSEN, Guttorm
 8        BAEKKEVOLD, Espen
 9        VAEGER, Marjan
10        BRANDTZAEG, Per
12 <120> TITLE OF INVENTION: NF-HEV COMPOSITIONS AND METHODS OF USE
15 <130> FILE REFERENCE: ENDOC.011APC
17 <140> CURRENT APPLICATION NUMBER: US/10/539,527
17 <141> CURRENT FILING DATE: 2005-06-17
17 <150> PRIOR APPLICATION NUMBER: US 60/435827
18 <151> PRIOR FILING DATE: 2002-12-19
20 <160> NUMBER OF SEQ ID NOS: 49
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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25 <211> LENGTH: 2645
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
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31 caaagtggaa gaacacagca agcaaagcct tgtgtttcaa gctgggaaaa tcccaacaga 120
32 aggccaaaga agtttgcccc atgtacttta tgaagctccg ctctggcctt atgataaaaa 180
33 aggaggcctg ttactttagg agagaaacca ccaaaaggcc ttcactgaaa acaggtagaa 240
34 agcacaaaag acatctggta ctcgctgcct gtcaacagca gtctactgtg gagtgctttg 300
35 cctttggtat atcaggggtc cagaaatata ctagagcact tcatgattca agtatcacag 360
36 gaatttcacc tattacagag tatcttgctt ctctaagcac atacaatgat caatccatta 420
37 cttttgcttt ggaggatgaa agttatgaga tatatgttga agacttgaaa aaagatgaaa 480
38 agaaagataa ggtgttactg agttactatg agtctcaaca cccctcaaat gaatcaggtg 540
39 acggtgttga tggtaagatg ttaatggtaa ccctgagtcc tacaaaagac ttctggttgc 600
40 atgccaacaa caaggaacac tctgtggagc tccataagtg tgaaaaacca ctgccagacc 660
41 aggccttctt tgtccttcat aatatgcact ccaactgtgt ttcatttgaa tgcaagactg 720
42 atcctggagt gtttataggt gtaaaggata atcatcttgc tctgattaaa gtagactctt 780
43 ctgagaattt gtgtactgaa aatatcttgt ttaagctctc tgaaacttag ttgatggaaa 840
44 cctgtgagtc ttgggttgag tacccaaatg ctaccactgg agaaggaatg agagataaag 900
45 aaagagacag gtgacatcta agggaaatga agagtgctta gcatgtgtgg aatgttttcc 960
46 atattatgta taaaaatatt ttttctaatc ctccagttat tcttttattt ccctctgtat 1020
47 aactgcatct tcaatacaag tatcagtata ttaaataggg tattggtaaa gaaacggtca 1080
48 acattctaaa gagatacagt ctgaccttta cttttctcta gtttcagtcc agaaagaact 1140
49 tcatatttag agctaaggcc actgaggaaa gagccatagc ttaagtctct atgtagacag 1200
50 ggatccattt taaagagcta cttagagaaa taattttcca cagttccaaa cgataggctc 1260
51 aaacactaga gctgctagta aaaagaagac cagatgcttc acagaattat cattttttca 1320
52 actggaataa aacaccaggt ttgtttgtag atgtcttagg caacactcag agcagatctc 1380
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53 ccttactgtc aggggatatg gaacttcaaa ggcccacatg gcaagccagg taacataaat 1440
54 gtgtgaaaaa gtaaagataa ctaaaaaatt tagaaaaata aatccagtat ttgtaaagtg 1500
55 aataacttca tttctaattg tttaattttt aaaattctga tttttatata ttgagtttaa 1560
56 gcaaggcatt cttacacgag gaagtgaagt aaattttagt tcagacataa aatttcactt 1620
57 attaggaata tgtaacatgc taaaactttt tttttttaa agagtactga gtcacaacat 1680
58 gttttagagc atccaagtac catataatcc aactatcatg gtaaggccag aaatcttcta 1740
59 acctaccaga gcctagatga gacaccgaat taacattaaa atttcagtaa ctgactgtcc 1800
60 ctcatgtcca tggcctacca tcccttctga ccctggcttc cagggaccta tgtctttaa 1860
61 tactcactgt cacattgggc aaagttgctt ctaatcctta tttcccatgt gcacaagtct 1920
62 ttttgtattc cagcttcctg ataacactgc ttactgtgga atattcattt gacatctgtc 1980
63 tcttttcatt tcttttaact accatgccct tgatatatct tttgcacctg ctgaacttca 2040
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65 ttttagataa agctattaat ggcaatattt ttttgctaaa cgtttttgtt ttttactgtc 2160
66 actagggcaa taaaatttat actcaaccat ataataacat tttttaacta cataaaggag 2220
67 tagttttat tttaaagtct tagcaatttc tattacaact tttcttagac ttaacactta 2280
68 tgataaatga ctaacatagt aacagaatct ttatgaaata tgaccttttc tgaaaataca 2340
69 tacttttaca tttctacttt attgagacct attagatgta agtgctagta gaatataaga 2400
70 taaaagaggc tgagaattac catacaaggg tattacaact gtaaaacaat ttatctttgt 2460
71 ttcattgttc tgtcaataat tgttaccaaa gagataaaaa taaaagcaga atgtatatca 2520
72 tcccatctga aaaacactaa ttattgacat gtgcatctgt acaataaact taaaatgatt 2580
73 attaaataat caaatatatc tactacattg tttatattat tgaataaagt atattttcca 2640
74 aatgt                                                       2645
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77 <211> LENGTH: 2486
78 <212> TYPE: DNA
79 <213> ORGANISM: Mus musculus
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83 tcagcagcac cgcaggcgaa gccctggtcc cgccttgcaa aataagaaga tcccaacaga 120
84 agaccaaaga attctgccat gtctactgca tgagactccg ttctggcctc accataagaa 180
85 aggagactag ttattttagg aaagaaccca cgaaaagata ttcactaaaa tcgggtacca 240
86 agcatgaaga gaacttctct gcctatccac gggattctag gaagagatcc ttgcttggca 300
87 gtatccaagc atttgctgcg tctgttgaca cattgagcat ccaaggaact tcacttttaa 360
88 cacagtctcc tgcctccctg agtacataca atgaccaatc tgttagtttt gttttggaga 420
89 atggatgtta tgtgatcaat gttgacgact ctggaaaaga ccaagagcaa gaccaggtgc 480
90 tactacgcta ctatgagtct ccctgtcctg caagtcaatc aggcgacggt gtggatggga 540
91 agaagctgat ggtgaacatg agtcccatca aagacacaga catctggctg catgccaacg 600
92 acaaggacta ctccgtggag cttcaaaggg gtgacgtctc gcctccggaa caggccttct 660
93 tcgtccttca caaaaagtcc tcggactttg tttcatttga atgcaagaat cttcctggca 720
94 cttacatagg agtaaaagat aaccagctgg ctctagtgga ggagaaagat gagagctgca 780
95 acaatattat gtttaagctc tcgaaaatct aatgcagtaa aacgcctgtg cgttctgggt 840
96 tgaatgactt aatgcttcca actgaagaaa gggtaacaga gagaaagaaa gccattcttg 900
97 gcttacgatg ttgtggaatg ttattatgta gaaaacttct tttatttcct tttcttcagc 960
98 tacatgttca atagactcac agatatatga cttacggcgt tggtaaagaa actgaaggag 1020
99 attcagcctt gctctttcct tttctctgcc ttgagtcctg tatgaaatca cactcacgga 1080
100 cttcagaaga gcaggcacca cagtgcatgg tttgctttag agagggtcca tttcaaaaac 1140
101 cttcataaaa acaatgcaaa acaagaaaac aaccgaacaa aaaaaccacc tatttcctgg 1200
102 ttctaaacaa atgattgtaa tactagagca gttagtggga ggaccagcta gggggaggat 1260
103 cacctagggg aggaccagct aggggaggga ccagctgctg caaagactga ctgtttctca 1320
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/539,527

DATE: 10/03/2006
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Input Set : A:\ENDOC.011APC.txt
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104 cttataataa aatgccaaat gcctccgcag atgccccagg caaccctcag atcagccctt 1380
105 tctgtgaaga gtggcgttac ctgtgcttgt ttccttctta aacttccaat ttttctcttt 1440
106 taacacattt aacatttaac tttaagcaag ccagcttaca ttaggaagtg aaagacattt 1500
107 tagttcccac ccgtgattga aatcattgac tatatctaac aagcttaaag tctcctgtaa 1560
108 gaactgatca ggatatacac taggacatgc caatagaatg ggatctcatg gtgcagtctg 1620
109 aagccctcca actggagaga cgctaacatc atccttctcg ctgatttcca aggagctatg 1680
110 actttggatg catgcatctg cttggatgag atgtctcggc tgcttgcttt ccttatgcac 1740
111 acgttctgtt cagcttcaca gcagcaatgc tcacggtgga atagcttagc ttagcttctg 1800
112 ccccttcttt ggttcttttg accaccatat ccgtaacggc tctcctactc cctcagcttt 1860
113 ctttctcttt gctctgacgt ctatatgcca acacacttat tccactgtct ttaccctgca 1920
114 ctgcagaatt ttacatctac ctactggtta ccaggttgtc ccctgaacaa ccttcctttg 1980
115 tgttttactg ttattaaagt agtaatattt gtattcaacc atgtagtaat attttaagcc 2040
116 actaaaggaa tagttttact tatttagaca acagcaattt ctactacatt tttataagct 2100
117 taaaacttac atgtttaaa acttaaaacg ataaagacaa taacaacatt gatggagtat 2160
118 gatatgacag ttcagaaagg gttagctctt atcttccagt cgaggaaacc tattgtatac 2220
119 aatagctgga ggaatgtatg atcaaagagg ccgggaaccg ccgtgtagga tcgtacggct 2280
120 gtaacaggta taattgtttc attaatttgt cacagtctta ctgtagagga atgtaaaggc 2340
121 ggaatctgcg tcattcctct ggaaaccaca gtgttgactc tgtgaatctg tacgatatct 2400
122 ttaaagtagt aactagtag tcaaatgtgt tcttgacgtt gttcataact ttgaataaac 2450
123 catttttcaa aaccacgtgt gaccac                                     2486
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 2714
127 <212> TYPE: DNA
128 <213> ORGANISM: Canis familiaris
130 <400> SEQUENCE: 3
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132 tattcaacca cgaaaatccc cccagcaaag atgaacagtt cagcagacaa ggctttggta 120
133 aaatctccta agctgagaaa atcccaacag aagcctgaag gagtttgcca gatgtacttt 180
134 atgcaactgc gttctggcct tatcatagaa aagacatcct gttactttag gaaagaaatc 240
135 accaaaaggt attcaccaag aacagctgaa aagtgcagaa agcaatgtct ggtattcact 300
136 gcctgtcatc agcagctgaa caaagatttc acctctgatg tccctatgtt acagaaatgt 360
137 tttggaagag ctaatgttcc aagtatccaa gaatattctg cttctctgag cacatacaat 420
138 gatcaatcta ttactttcgt ttttgaggat ggaagttatg agatctatgt agaagacttg 480
139 agaaaaggcc aagagaaaga taaggtgtta ttccgttatt atgattccca atccccctca 540
140 catgaaacag gtgatgatgt tgatggccag acgttattgg taaacctgag tcctacaaaa 600
141 gataaagatt ttttgctgca tgccaacaac gaggaacatt ctgtggagct acaaaaatgt 660
142 gaaaaccaat tgccagacca ggccttcttc ctccttcata ggaagtcttc tgaatgtgtt 720
143 tcattcgaat gtaagaacaa tcctggagtg tttataggag taaaggataa ccaccttgct 780
144 ttaattaaag taggagacca aactaaggat tcatatatag agaaaaccat atttaagctc 840
145 tcttaaattt aatgggatga aaaaagttgt caatcctggg ttgggtagcc cagatagcta 900
146 ctgctgaaga aagaataaga gataaagaga tagacaacat ttaagggaaa taaagagtac 960
147 ttagtatgct atggaatgtt tttcttatta tgtgtaaaat atatttttat aatccttcag 1020
148 ttctgttttt tattacccctt gtctcactac atattcaata gtgtattatt aaggagacct 1080
149 cagaaaatat acaacctgac tttttactttt tctacttgct gtcaagaaag agcttaatat 1140
150 ctaattaagc tctgctgaga cctctgggga caaggaaggg ccttaatcca agtttcattt 1200
151 tagacaagga tttcaaaaag ccacatagag acataatttt ccctggttcc aaacaagttc 1260
152 aaacagtaga gctgttggtg aaaagacaat cagctctact tagactgaac atttcacaaa 1320
153 tggaataaaa caccaaattt gtttgaagat tcccaaaatt tcagatactt acacatgtag 1380
154 gcagataata taaatatgtg aaatgacaga gacaattgaa aaaattaaga aaaataaatc 1440
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RAW SEQUENCE LISTING   DATE: 10/03/2006
PATENT APPLICATION: US/10/539,527   TIME: 10:13:53

Input Set : **A:\ENDOC.011APC.txt**
Output Set: **N:\CRF4\10032006\J539527.raw**

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155 ctgtatttgt aaagtaaata attttacctc taattgtttc attttaaaa tgctgatttt 1500
156 tatagatgga gttaaattta gcaagacatt cttacattag gaagtaaaat aaattttatc 1560
157 tcagacatat aattgaaatc attgggaata tctcacaaac taaaacatta ttttaaagca 1620
158 ctgagacaca acatacctta agacatcaaa gtaccatggg atccaagtac catggtgagg 1680
159 ccacaagttc ccttatctac tagaacctag attggacaca gcattaacat tacaatttta 1740
160 ataactggct atcccttatg ttcattgtat actgtctttc tgactctatg ctccagggat 1800
161 ctgtaacttg atatacatgt caccctgcac aaaatttctt ataatccttt cttaccatgt 1860
162 gtacaagtgt ttttcttgtc caccttcctg attagtctgt ttactatgga atatttattg 1920
163 acttttcttc cttcatttct tttgaccaac tctgttcttg atatacattt tgtgccccgt 1980
164 gagcttcatt ccatatcacc tgacctctgg acaccaacat atttttctat tttgtctctc 2040
165 tgatgtagaa tttcacataa gcctattgat gggaatattt tttattaaac atctttgtat 2100
166 tttacattac taaggtagta aaatttattc tcaacgatat atgattttc aactactaaa 2160
167 ggaataattt ttgcttattt taagtcttaa attctactat aacttttca taggcttaac 2220
168 attgacaata agtgataaac tagtaacaga atacttatga aatacaactg tttctgaaag 2280
169 tgttggcttt ttaattctaa tttgttgaga tctattggat ataatgatgg tggaacataa 2340
170 gattagaaag gctgagaatt actgagtgag ggtaaacaat tgtaaacaac atagctttca 2400
171 ttacattgtc agtttttatta tgaagacaaa aataaaagca gaatatatat catcttctct 2460
172 gaaaaacact aaatgttgac catatgcatc tgtatgatat actcgaaatg atttgtttta 2520
173 agtaactaaa tatattaatt acattaaatt ctcaagttct attttttaaa agtatgtgag 2580
174 gccatgatga ttttatcata aaataactat tctgaaattt ttaagtcaaa gcaatcttac 2640
175 cttaatccac tgatgttggt atctggggta ggtcatttgt ctggtgattc aaaactaaat 2700
176 aagatattcc aaag                                                    2714
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179 <211> LENGTH: 270
180 <212> TYPE: PRT
181 <213> ORGANISM: Homo sapiens
183 <400> SEQUENCE: 4
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185 1               5                   10                  15
186 Trp Lys Asn Thr Ala Ser Lys Ala Leu Cys Phe Lys Leu Gly Lys Ser
187             20                  25                  30
188 Gln Gln Lys Ala Lys Glu Val Cys Pro Met Tyr Phe Met Lys Leu Arg
189         35                  40                  45
190 Ser Gly Leu Met Ile Lys Lys Glu Ala Cys Tyr Phe Arg Arg Glu Thr
191     50                  55                  60
192 Thr Lys Arg Pro Ser Leu Lys Thr Gly Arg Lys His Lys Arg His Leu
193 65                  70                  75                  80
194 Val Leu Ala Ala Cys Gln Gln Gln Ser Thr Val Glu Cys Phe Ala Phe
195                 85                  90                  95
196 Gly Ile Ser Gly Val Gln Lys Tyr Thr Arg Ala Leu His Asp Ser Ser
197             100                 105                 110
198 Ile Thr Gly Ile Ser Pro Ile Thr Glu Tyr Leu Ala Ser Leu Ser Thr
199             115                 120                 125
200 Tyr Asn Asp Gln Ser Ile Thr Phe Ala Leu Glu Asp Glu Ser Tyr Glu
201     130                 135                 140
202 Ile Tyr Val Glu Asp Leu Lys Lys Asp Glu Lys Lys Asp Lys Val Leu
203 145                 150                 155                 160
204 Leu Ser Tyr Tyr Glu Ser Gln His Pro Ser Asn Glu Ser Gly Asp Gly
205                 165                 170                 175
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207           180             185             190
208 Trp Leu His Ala Asn Asn Lys Glu His Ser Val Glu Leu His Lys Cys
209           195             200             205
210 Glu Lys Pro Leu Pro Asp Gln Ala Phe Phe Val Leu His Asn Met His
211     210             215             220
212 Ser Asn Cys Val Ser Phe Glu Cys Lys Thr Asp Pro Gly Val Phe Ile
213 225             230             235                 240
214 Gly Val Lys Asp Asn His Leu Ala Leu Ile Lys Val Asp Ser Ser Glu
215             245             250             255
216 Asn Leu Cys Thr Glu Asn Ile Leu Phe Lys Leu Ser Glu Thr
217             260             265             270
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221 <211> LENGTH: 266
222 <212> TYPE: PRT
223 <213> ORGANISM: Mus musculus
225 <400> SEQUENCE: 5
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228 Phe Ser Ser Thr Ala Gly Glu Ala Leu Val Pro Pro Cys Lys Ile Arg
229           20              25              30
230 Arg Ser Gln Gln Lys Thr Lys Glu Phe Cys His Val Tyr Cys Met Arg
231           35              40              45
232 Leu Arg Ser Gly Leu Thr Ile Arg Lys Glu Thr Ser Tyr Phe Arg Lys
233     50              55              60
234 Glu Pro Thr Lys Arg Tyr Ser Leu Lys Ser Gly Thr Lys His Glu Glu
235 65              70              75              80
236 Asn Phe Ser Ala Tyr Pro Arg Asp Ser Arg Lys Arg Ser Leu Leu Gly
237             85              90              95
238 Ser Ile Gln Ala Phe Ala Ala Ser Val Asp Thr Leu Ser Ile Gln Gly
239           100             105             110
240 Thr Ser Leu Leu Thr Gln Ser Pro Ala Ser Leu Ser Thr Tyr Asn Asp
241           115             120             125
242 Gln Ser Val Ser Phe Val Leu Glu Asn Gly Cys Tyr Val Ile Asn Val
243     130             135             140
244 Asp Asp Ser Gly Lys Asp Gln Glu Gln Asp Gln Val Leu Leu Arg Tyr
245 145             150             155             160
246 Tyr Glu Ser Pro Cys Pro Ala Ser Gln Ser Gly Asp Gly Val Asp Gly
247           165             170             175
248 Lys Lys Leu Met Val Asn Met Ser Pro Ile Lys Asp Thr Asp Ile Trp
249           180             185             190
250 Leu His Ala Asn Asp Lys Asp Tyr Ser Val Glu Leu Gln Arg Gly Asp
251           195             200             205
252 Val Ser Pro Pro Glu Gln Ala Phe Phe Val Leu His Lys Lys Ser Ser
253     210             215             220
254 Asp Phe Val Ser Phe Glu Cys Lys Asn Leu Pro Gly Thr Tyr Ile Gly
255 225             230             235             240
256 Val Lys Asp Asn Gln Leu Ala Leu Val Glu Glu Lys Asp Glu Ser Cys
257             245             250             255
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/03/2006
PATENT APPLICATION: US/10/539,527   TIME: 10:13:54

Input Set : **A:\ENDOC.011APC.txt**
Output Set: **N:\CRF4\10032006\J539527.raw**

Please Note:
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:8; N Pos. 6352,6353,6354,6355,6356,6357,6358,6359,6360,6361,6362,6363
Seq#:8; N Pos. 6364,6365,6366,6367,6368,6369,6370,6371,6372,6373,6374,6375
Seq#:8; N Pos. 6376,6377,6378,6379,6380,6381,6382,6383,6384,6385,6386,6387
Seq#:8; N Pos. 6388,6389,6390,6391,6392,6393,6394,6395,6396,6397,6398,6399
Seq#:8; N Pos. 6400,6401,6402,6403,6404,6405,6406,6407,6408,6409,6410,6411
Seq#:8; N Pos. 6412,6413,6414,6415,6416,6417,6418,6419,6420,6421,6422,6423
Seq#:8; N Pos. 6424,6425,6426,6427,6428,6429,6430,6431,6432,6433,6434,6435
Seq#:8; N Pos. 6436,6437,6438,6439,6440,6441,6442,6443,6444,6445,6446,6447
Seq#:8; N Pos. 6448,6449,6450,6451
Seq#:17; N Pos. 26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45
Seq#:17; N Pos. 46,47,48,49,50,51,52

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/539,527**

DATE: 10/03/2006
TIME: 10:13:54

Input Set : **A:\ENDOC.011APC.txt**
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```
L:17 M:270 C: Current Application Number differs, Replaced Current Application No
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:603 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:609 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:715 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:6300
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:6360
L:717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:6420
L:896 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17
L:897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
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